

October 29, 2004

Mr. Joseph E. Venable  
Vice President Operations  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 (WATERFORD 3) -  
REQUEST FOR ADDITIONAL INFORMATION RELATED TO REVISION TO  
FACILITY OPERATING LICENSE AND TECHNICAL SPECIFICATIONS -  
EXTENDED POWER UPRATE REQUEST (TAC NO. MC1355)

Dear Mr. Venable:

By application dated November 13, 2003, and supplemented by letters dated January 29, March 4, April 15, May 7, May 12, May 13, May 21, May 26, July 14, July 15, July 28, August 10, August 19, August 25, September 1, September 14, October 8 (2 letters), October 13, October 18, and October 19, 2004, Entergy Operations, Inc., requested changes to the Facility Operating License and Technical Specifications for the Waterford Steam Electric Station, Unit 3, which would allow an increase in the rated thermal power from 3,441 megawatts thermal (MWt) to 3,716 MWt.

After reviewing your request, the Nuclear Regulatory Commission staff has determined that additional information is required in the area of "Steam Generator Pressure - Low" trip setpoints to complete the review. We discussed this information with your staff by telephone and they agreed to provide the additional information requested in the enclosure within 15 days of receipt of this letter.

If you have any questions, please call me at (301) 415-1480.

Sincerely,

/RA/

N. Kalyanam, Project Manager, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure: Request for Additional Information

cc w/encl: See next page

October 29, 2004

Mr. Joseph E. Venable  
Vice President Operations  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 (WATERFORD 3) -  
REQUEST FOR ADDITIONAL INFORMATION RELATED TO REVISION TO  
FACILITY OPERATING LICENSE AND TECHNICAL SPECIFICATIONS -  
EXTENDED POWER UPRATE REQUEST (TAC NO. MC1355)

Dear Mr. Venable:

By application dated November 13, 2003, and supplemented by letters dated January 29, March 4, April 15, May 7, May 12, May 13, May 21, May 26, July 14, July 15, July 28, August 10, August 19, August 25, September 1, September 14, October 8 (2 letters), October 13, October 18, and October 19, 2004, Entergy Operations, Inc., requested changes to the Facility Operating License and Technical Specifications for the Waterford Steam Electric Station, Unit 3, which would allow an increase in the rated thermal power from 3,441 megawatts thermal (MWt) to 3,716 MWt.

After reviewing your request, the Nuclear Regulatory Commission staff has determined that additional information is required in the area of "Steam Generator Pressure - Low" trip setpoints to complete the review. We discussed this information with your staff by telephone and they agreed to provide the additional information requested in the enclosure within 15 days of receipt of this letter.

If you have any questions, please call me at (301) 415-1480.

Sincerely,

/RA/

N. Kalyanam, Project Manager, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure: Request for Additional Information

cc w/encl: See next page

DISTRIBUTION

PUBLIC

RidsAcrsAcnwMailCenter  
RidsNrrLADJohnson  
RidsNrrDlpmDpr

PDIV-1 r/f

RidsNrrDlpmLpdiv1 (DJaffe)  
RidsRgn4MailCenter (AHowell)  
RidsNrrDeDpr

RidsOgcRp

RidsNrrPMNKalyanam  
AMarinos/HLi  
RidsNrrDssaDpr

Accession No.: ML043080365

\* RAI input from the staff without any major change

OFFICE	PDIV-1/PM	PDIV-1/LA	DE/EEIB/A*	PDIV-1/SC(A)
NAME	NKalyanam	DJohnson	AMarinos/HLi	DJaffe for MWebb
DATE	10/28/04	10/28/04	10/25/04	10/29/04

OFFICIAL COPY

REQUEST FOR ADDITIONAL INFORMATION

ENTERGY OPERATIONS, INC. (ENTERGY)

WATERFORD STEAM ELECTRIC STATION, UNIT 3 (WATERFORD 3)

DOCKET NO. 50-382

The NRC Staff has determined that setpoint Allowable Values (AV) established by means of Instrument Society of America (ISA) 67.04 Part 2 Method 3 do not provide adequate assurance that a plant will operate in accordance with the assumptions upon which the plant safety analyses have been based. These concerns have been described in various public meetings. The presentation used in public meetings in June and July 2004 to describe the staff concerns is available on the public website under ADAMS Accession Number ML041810346. (Note: Public access to ADAMS has been temporarily suspended so that security reviews of publicly available documents may be performed and potentially sensitive information removed. Please check the NRC Web site for updates on the resumption of ADAMS access.)

Staff is currently formulating generic action on this subject. It is presently clear, however, that staff will not be able to accept any requested Technical Specification (TS) changes that are based upon the use of Method 3, unless the method is modified to alleviate the staff concerns. In particular, each setpoint limit in the TSs must ensure at least 95 percent probability with at least 95 percent confidence that the associated action will be initiated with the process variable no less conservative than the initiation value assumed in the plant safety analyses. In addition, the operability of each instrument channel addressed in the setpoint-related TSs must be ensured by the TSs. That is, conformance to the TSs must provide adequate assurance that the plant will operate in accordance with the safety analyses. Reliance on settings or practices outside the TSs and not mandated by them is not adequate.

Staff has determined that AV computed in accordance with ISA Method 1 or 2 do provide adequate assurance that the safety analysis limits will not be exceeded. Staff has also determined that an entirely different approach, based upon the performance of an instrument channel rather than directly upon the measured trip setting, can also provide the required assurance. This alternative approach, designated Performance-Based TSs, sets limits on acceptable nominal setpoints and upon the observed deviation in the measured setpoint from the end of one test to the beginning of the next. This approach has been accepted for use at R. E. Ginna Nuclear Power Plant, and is discussed in a Safety Evaluation (SE) available via ADAMS Accession Number ML041180293. The referenced SE is specific to Ginna, and is cited here only as a general example for other plants. It is up to the licensee to modify the approach as necessary to meet the indicated objectives for the particular plant(s) in question. In addition, licensees are welcome to propose alternative approaches that provide the indicated confidence, but such tentative approaches must be presented in detail and must be shown explicitly to provide adequate assurance that the safety analysis assumptions will not be violated.

The Nuclear Energy Institute (NEI) has indicated an intent to submit a white paper concerning this matter for NRC consideration. Receipt of that white paper is anticipated in late October or early November 2004. Licensees may choose to endorse whatever approach and justification is described in that white paper, or to act independently of the NEI. If the NEI approach is

found to be acceptable to the staff, it will be necessary for each licensee who chooses to use it to affirm that the salient conditions, practices, etc. described in it are applicable to their individual situations.

Please indicate how you wish to proceed in regard to the "Steam Generator Pressure - Low" trip setpoint because this parameter has setpoint changed due to power uprate application. Following are some examples of acceptable actions:

1. Demonstrate that the approach that you have used to develop the proposed limits provides adequate assurance that the plant will operate in accordance with the safety analyses. Show that Operability is ensured in the TS.
2. Suspend consideration of setpoint-related aspects of your request pending generic resolution of the staff concern.
3. Revise your request to incorporate Method 1, Method 2, or Performance-Based TS.
4. Revise your request to incorporate some other approach that you demonstrate to provide adequate confidence that the plant will operate in accordance with the safety analyses and show that Operability is ensured in the TSs.

Waterford Steam Electric Station, Unit 3

cc:

Mr. Michael E. Henry, State Liaison Officer  
Department of Environmental Quality  
Permits Division  
P.O. Box 4313  
Baton Rouge, Louisiana 70821-4313

Vice President, Operations Support  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286-1995

Director  
Nuclear Safety Assurance  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

Wise, Carter, Child & Caraway  
P. O. Box 651  
Jackson, MS 39205

General Manager Plant Operations  
Waterford 3 SES  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

Licensing Manager  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70066-0751

Winston & Strawn  
1400 L Street, N.W.  
Washington, DC 20005-3502

Resident Inspector/Waterford NPS  
P. O. Box 822  
Killona, LA 70066-0751

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

Parish President Council  
St. Charles Parish  
P. O. Box 302  
Hahnville, LA 70057

Executive Vice President  
& Chief Operating Officer  
Entergy Operations, Inc.  
P. O. Box 31995  
Jackson, MS 39286-1995

Chairman  
Louisiana Public Services Commission  
P. O. Box 91154  
Baton Rouge, LA 70825-1697